

1. 集成外部组件
2. 集成 HDFS

2. 1. 开启插件

2. 2. 确认更新相关配置

2. 3. 重启 HDFS

2. 4. 验证
3. 集成其他大数据组件

1. 集成外部组件

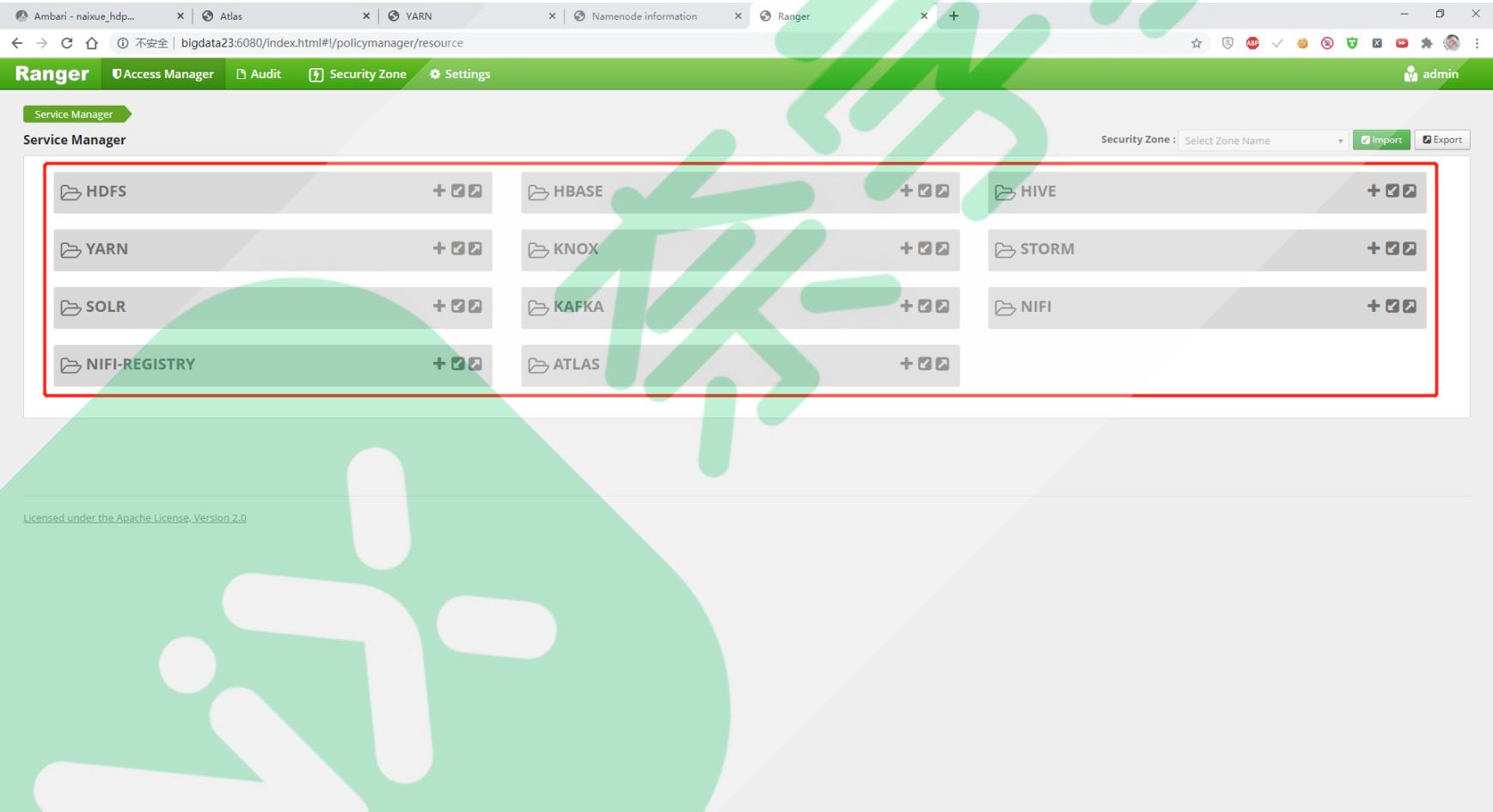
在安装了 Ranger 之后，接下来需要跟 Hadoop 各个组件集成去管理他们的安全。

集成外部组件就需要用到 Ranger 的一个核心组件 AgentPlugin，即通过安装插件的方式去集成，Ambari 替我们安装好了插件，只需要启用插件即可。

集成分两种情形：

情形	解决办法
组件在安装 Ranger 之前已经安装过	启动对应的 Ranger 插件即可
组件还没安装	先安装组件（Ranger会一起跟着安装），然后启动对应的 Ranger 插件

刚安装好的 Ranger是没有任何插件的：



2.2. 确认更新相关配置

Ambari - naixue_hdp...AtlasYARNNamenode informationRanger

bigdata22:8080/#/main/services/RANGER/configs

naixue_hdp...admin

Dependent Configurations

Recommended Changes

Based on your configuration changes, Ambari is recommending the following dependent configuration changes. Ambari will update all checked configuration changes to the Recommended Value. Uncheck any configuration to retain the Current Value.

Property	Service	Config Group	File Name	Original Value	Recommended Value
<input checked="" type="checkbox"/> ranger-hdfs-plugin-enabled	HDFS	Default	ranger-hdfs-plugin-properties	No	Yes
<input checked="" type="checkbox"/> REPOSITORY_CONFIG_USERNAME	HDFS	Default	ranger-hdfs-plugin-properties	hadoop	hdfs
<input checked="" type="checkbox"/> dfs.permissions.ContentSummary.subAccess	HDFS	Default	hdfs-site	false	true
<input checked="" type="checkbox"/> dfs.namenode.inode.attributes.provider.class	HDFS	Default	hdfs-site	Property undefined	org.apache.ranger.authorization.hadoop.RangerHdfsAuthorizer

CANCELOK

SmartSenseSpark2Zeppelin Note...HostsAlertsCluster AdminStack and VersionsService Accounts

Hive Ranger PluginOFF

DISCARDSAVE

Ambari - naixue_hdp...AtlasYARNNamenode informationRanger

bigdata22:8080/#/main/services/RANGER/configs

naixue_hdp...admin

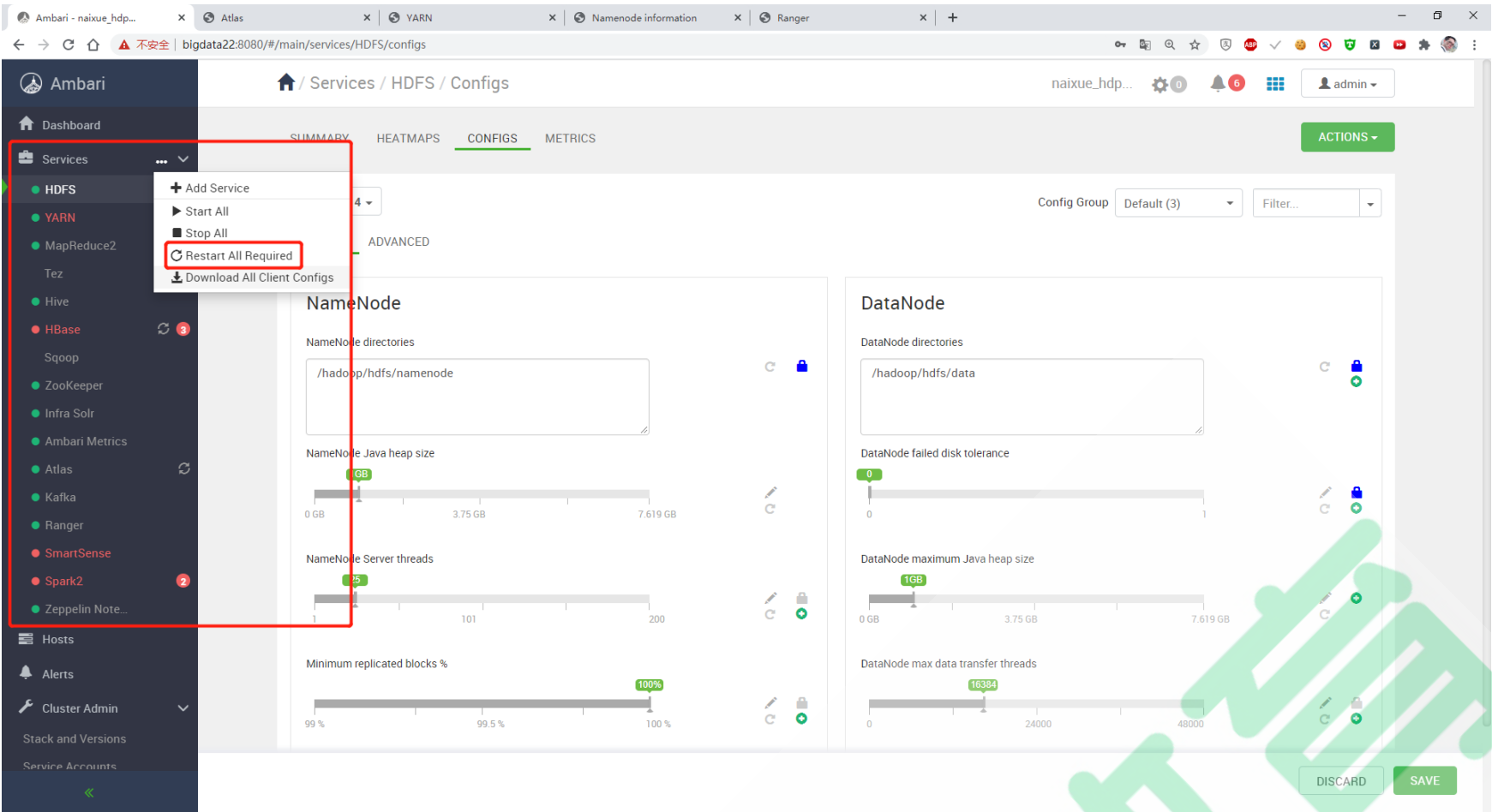
Configurations

Warning	Hive	hive.security.authorization.manager	org.apache.hadoop.hive.ql.security.authorization.plugin.fallback.FallbackHiveAuthorizerFactory	If hive.auto.convert.join.noconditionaltask is off, this parameter does not take affect. However, if it is on, and the sum of size for n-1 of the tables/partitions for a n-way join is smaller than this size, the join is directly converted to a mapjoin(there is no conditional task). If Ranger Hive Plugin is disabled, hive.security.authorization.manager needs to be set to org.apache.hadoop.hive.ql.security.authorization.plugin.sqlstd.SQLStdHiveAuthorizerFactory. The Hive client authorization manager class name. The user defined authorization class should implement interface org.apache.hadoop.hive.ql.security.authorization.HiveAuthorizationProvider.
Warning	Hive	hive.tez.container.size	341	Value is less than the recommended default of 1023 By default, Tez uses the java options from map tasks. Use this property to override that value.
Warning	Ambari Metrics	hbase_master_heapsize	896	Value is less than the recommended default of 1152 HBase Master Heap Size. In embedded mode, total heap size is sum of master and regionserver heap sizes.
Warning	Tez	tez.am.java.opts	-server -Xmx272m -Djava.net.preferIPv4Stack=true	Value is less than the recommended default of -Xmx1091m
Warning	Tez	tez.am.resource.memory.mb	682	Value is less than the recommended default of 1023 Value is less than the recommended default of 1023 The amount of memory to be used by the AppMaster. Used only if the value is not specified explicitly by the DAG definition.
Warning	Tez	tez.runtime.io.sort.mb	90	Value is less than the recommended default of 270 The size of the sort buffer when output needs to be sorted
Warning	Tez	tez.runtime.unordered.output.buffer.size.mb	25	Value is less than the recommended default of 76 The size of the buffer when output does not require to be sorted
Warning	Tez	tez.task.resource.memory.mb	341	Value is less than the recommended default of 1023 The amount of memory to be used by launched tasks. Used only if the value is not specified explicitly by the DAG definition.

CANCELPROCEED ANYWAY

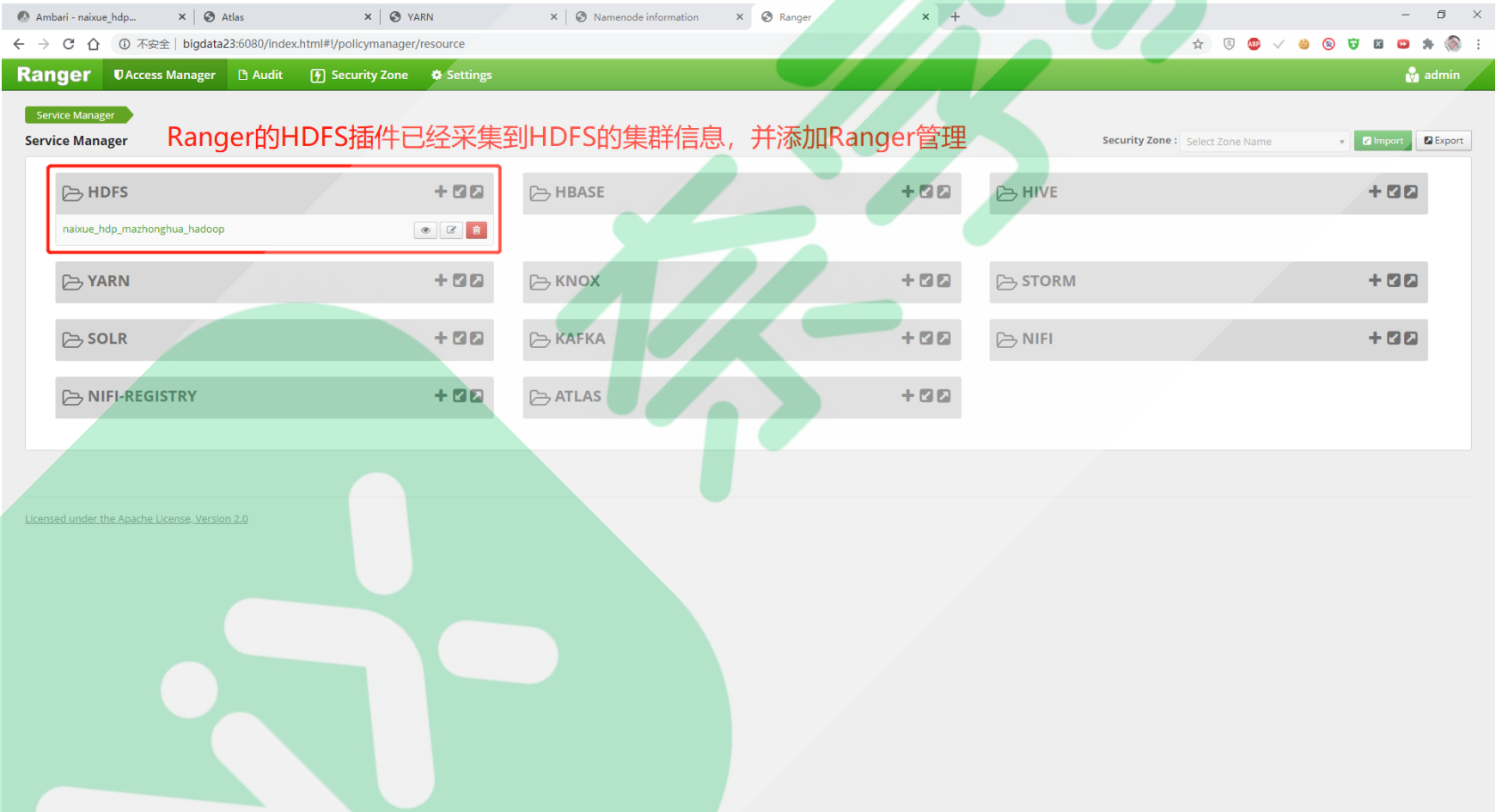
2.3. 重启 HDFS

启动完 Ranger HDFS 插件需要重启 HDFS 等相关服务(一个不要落下):



2.4. 验证

刷新 Ranger 首页，我们能看到 HDFS 服务已经被添加到 Ranger 接受它的管理了：



3. 集成其他大数据组件

集成其他的大数据组件的方式和集成 HDFS 一样。所以可以一次性搞定，然后全部重启。

Ambari - naixue_hdp...

Atlas

YARN

Namenode information

Ranger

+

bigdata22:8080/#/main/services/RANGER/configs

naixue_hdp... 1 8 admin

Ambari

Dashboard

Services

HDFS

YARN

MapReduce2

Tez

Hive

HBase

Sqoop

ZooKeeper

Infra Solr

Ambari Metrics

Atlas

Kafka

Ranger

SmartSense

Spark2

Zeppelin Note...

Hosts

Alerts

Cluster Admin

Stack and Versions

Service Accounts

Services / Ranger / Configs

SUMMARY CONFIGS ACTIONS

Version: 6 Config Group Default (3) Filter...

RANGER ADMIN RANGER USER INFO RANGER PLUGIN RANGER AUDIT RANGER TAGSYNC ADVANCED

Ranger Plugin

HDFS Ranger Plugin

ON

YARN Ranger Plugin

ON

Hive Ranger Plugin

ON

Hbase Ranger Plugin

ON

Kafka Ranger Plugin

ON

Atlas Ranger Plugin

ON

DISCARD SAVE

